7. (Twice Amended) A method as claimed in claim 1 wherein the third primer is of a sequence corresponding to the sequence in the first primer on the 5' side of the digestion resistant region of that primer.

C2

8. (Twice Amended) A method as claimed in claim 1 wherein the fourth primer is of a sequence corresponding to the sequence in the second primer on the 5' side of the digestion resistant region of that primer.

15. (Twice Amended) A method as claimed in claim 1 wherein the 5'-ends of the first, second, third and fourth primers are resistant to digestion by an exonuclease functioning as a single strand active exonuclease.

C3

17. (Twice Amended) A method as claimed in claim 1 wherein at least one of the nucleoside triphosphates provided as (e) of claim 1 is modified such that when it is incorporated in a growing nucleic acid chain it is resistant to digestion by the exonuclease.

C4

20. (Twice Amended) A method of amplifying complementary first and second nucleic acid sequences each of which has a binding region at its 3' end, the method comprising treating the separated single stranded sequences with

(a) first and second primers each capable of hybridising to the 3'-binding regions of the first and second strands respectively and each including remote from its 5'-end a digestion resistant region which, with the primer hybridised to a complementary 3'-binding region, allows only partial digestion of the primer by the enzyme (d) having 5'-double strand specific exonuclease activity,

C5

(b) third and fourth primers each having a degree of sequence homology with the particularly digestible regions of the first and second primers respectively whereby the third and fourth primers are capable of hybridising to the 3'-binding regions of the first and second strands respectively,

SUB D3

(c) an enzyme having strand displacing polymerase activity,

(d) an enzyme having 5' double stranded specific exonuclease activity, said enzyme (d) possibly being provided by enzyme (c) in the case where the latter also has the required exonuclease activity, and

(e) nucleoside triphosphates which are modified such that when incorporated into a growing nucleic they are resistant to digestion by the exonuclease under conditions permitting hybridisation, exonuclease digestion and strand displacement polymerisation thereby producing an amplified amount of the first and second strands.

Please cancel claim 19.

Please add the following claims:

21. (New) The method of claim 1 wherein the third primer is capable of hybridizing to the 3'-binding region for the first primer which is complementary to the 5'-side of the digestion resistant region of the first primer.

22. (New) The method of claim 1 wherein the fourth primer is capable of hybridizing to the 3'-binding region for the second primer which is complementary to the 5'-side of the digestion resistant region of the second primer.

23. (New) A method as claimed in claim 1 wherein the 5'-ends of the first, second, third and fourth nonhybridized primers are resistant to digestion by 5'-double strand specific exonuclease.

24. (New) A method as claimed in claim 1 wherein the 5'-ends of the first, second, third and fourth primers incorporate modified nucleotides which are resistant to digestion by 5'-double strand specific exonuclease.